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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,634	09/12/2003	Markku A. Oksanen	4208-4146	6966

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EXAMINER
JAIN, RAJ K

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
09/28/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com
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Office Action Summary	Application No.	Applicant(s)	
	10/660,634	OKSANEN ET AL.	
	Examiner	Art Unit	
	Raj K. Jain	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22,28 and 29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22, 28, 29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

General Remarks

Based on Applicants amendment submitted 17 July 2007, Examiner withdraws the 35 USC 112 rejection to Claims 2, 16, 17, 25 and 26 and furthermore withdraws the 35 USC 101 rejection to Claims 1, 3, 14 and 19 respectively.

Claim Objections

Claims 1, 20 and 21 are objected to because of the following informalities: Claim 1 a) doesn't make sense "....low-power communication terminals with another device....." Appropriate correction is required.

Claim 20 and 21 appear to be incorrectly labeled, since the claims depend from claim 19, it is believed Claim 20 should be "f" and Claim 21 as "g', however, currently they are labeled as "v" which doesn't sense in the context as currently stated. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 14-17, 28, 29 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Palin et al (US 2005/0058116 A1).

Regarding claims 1, 2, 14-16, 28 and 29, Palin discloses a method comprising:

a) establishing a first wireless low-power communication terminals with another device (Fig. 4, para 46);

b) establishing a second significantly faster wireless communication link with the another device (Fig. 4, para 46); and

c) controlling communication of the second wireless communication link via the first wireless communication link, wherein the first wireless link frees the second wireless communication link from link control overhead (para 47, Bluetooth controls UWB connection.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-13, 18-21are rejected under 35 U.S.C. 103(a) as being unpatentable over Palin et al (US 2005/0058116 A1) in view of Aiello et al (USP 7,088,795 B1).

Regarding claims 3-5, 7, 10-13, 18-20, Palin discloses UWB and Bluetooth communications (abstract, Fig. 4), comprising:

b) establishing a base device including an integrated memory 512 (Fig. 5) and a base UWB transmitter and receiver 414, 420;

c) initiating a low power communication connection between the mobile device and the base device (para 48.);

activating the mobile device UWB transmitter for transmitting data as modulated pulse trains to the base device receiver (Fig. 4 the wireless device 422 transmits digital data pulses to the transceiver 420, UWB is a wireless technology that broadcasts digital pulses that are timed very precisely across a very wide spectrum.);

f) demodulating the mobile device UWB transmitter pulse trains in the base device UWB receiver (Fig. 5, Processor 510 performs the demodulation of pulse trains from UWB transceiver 420.);

g) transmitting from the base device UWB transmitter to the mobile device UWB receiver, modulated pulse trains of the base device UWB transmitter interleaved between the modulated pulse trains of the mobile device UWB transmitter (Fig. 5, para 58); and

h) demodulating the modulated pulse trains of the base device UWB transmitter in the mobile device UWB receiver (Fig. 5, Processor 510 performs the demodulation of pulse trains from UWB transceiver 420, para 56.).

Palin fails to disclose a memory stick and exchanging of UWB parameters between devices via the low power communication.

Aiello discloses a memory and other memory devices which can include a memory stick and exchanging of UWB parameters between devices via the low power communication (see Figs. 1, 3, col 10 lines 39-45, col 3 lines 58-67.).

A memory storage device and the capability to exchange UWB parameters allows for networking devices to negotiate appropriate operating parameter and therefore increasing the pulse frequency between the devices. A memory device allows for increased storage of parameters and other data as necessary outside of the networking components. Thus it would have been obvious at the time the invention was made to incorporate the teachings of Aiello within Palin so to improve and enhance UWB network performance by increasing the transmission and storage capabilities of devices as desired.

Regarding claim 5, Palin discloses acknowledgements as appropriate (Fig. 2).

Regarding claim 6, Aiello discloses pulse repetition rate (see col 7 lines 58-67, claim 1.) A UWB pulse repetition frequency module controls the frequency at which the plurality of UWB pulses are generated by a pulse generation module. Pulse repetition frequency, is defined to avoid significant energy overlap between adjacent pulses. Thus it would have been obvious at the time the invention was made to incorporate the teachings of Aiello within Palin so as to avoid significant energy overlap between adjacent pulses.

Regarding claims 8, and 9, Palin discloses error checking which may incorporate heavy error coding and simple error check (para 34).

Regarding claim 21, Aiello discloses various visual display circuitries (see col 4 line 58 – col 5 line 14.). The use of display circuitries allows for users of receiving devices to accept, alter, modify etc the data as desires and appropriate. Reasons for combining same as above.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palin et al (US 2005/0058116 A1)) in view of Aiello et al (USP 7,088,795 B1), further in view of Woolgar et al (US 7135985 B2).

Palin and Aiello fail to disclose Bluetooth, Irda, Hiperlan, Zigbee.

Woolgarv discloses Bluetooth, Irda, Hiperlan, Zigbee (see col 3 lines 1-20). UWB use in Bluetooth, Irda, Hiperlan, Zigbee, 802.11, WLAN allows for adapting to differences in various radio protocols to be utilized via the UWB technology and therefore it would have been obvious to incorporate the teachings of Woolgrav within Palin and Aiello so as to broaden the spectrum of UWB use in different protocol groups.

Response to Arguments

Applicant's arguments with respect to claims 1-22, 28 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj K. Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raj K. Jain

/Raj K. Jain/

Art Unit 2616

September 21, 2007